Research culture: Funder perspective and initiatives

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UCD Research Culture Seminar, 21 September 2022

Research. Evidence. Action.

What is research culture?

The Royal Society

 Research culture encompasses the research communities' behaviours, values, expectations, attitudes and norms.

Not just about researchers!

 The complete system of shared values concerning the research process is embedded in the concept of research culture.*

Why do funders care?

The culture of research is central to research excellence; it affects who
does research, what research is done, how it is done and how it is
disseminated.

*Canti et al. (2021) Research culture: science from bench to society. The Company of Biologists. doi: 10.1242/bio.058919





Evolution of research culture themes

Lisbon 2007 – Houston, we have a problem!

Singapore 2010 – Principles, "Global CoC"

Montreal 2013 - Collaboration

Rio de Janerio 2015 – Promoting RI

Amsterdam 2017 – Behaviour

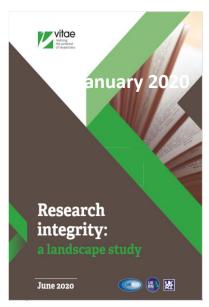
Hong Kong 2019 – Research Assessment, RRI

Cape Town 2022 – Equity, diversity, inclusion



2020 reports on research culture:

Attempting to understand the elements











The research culture gap

Where we are:



*Wellcome Trust (2020) What researchers think about the culture they work in.

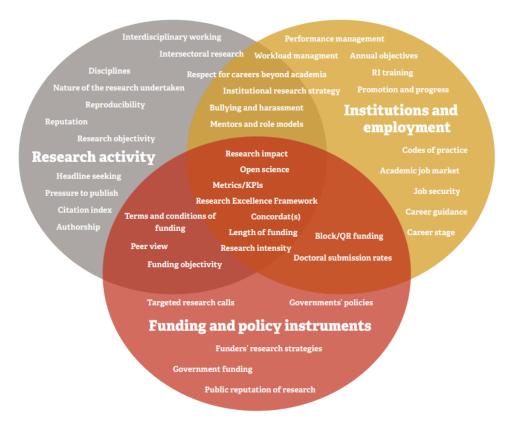
https://cms.wellcome.org/sites/default/files/what-researchers-think-about-the-culture-they-work-in.pdf





Quality

A complex web of influences



Methcalfe J, Wheat K, Munafo M, Parry J (2020) *Research Integrity: A landscape study*. https://www.ukri.org/wp-content/uploads/2020/10/UKRI-020920-ResearchIntegrityLandscapeStudy.pdf



Elements of research culture



A healthy research culture **recognises and rewards** the **full range** of activities that characterize **high-quality** research. It **empowers** researchers to do **rigorous**, **honest**, **reliable**, **open and valuable** research, at the same time **fostering** professional as well as personal well-being.



Where can funders have influence?

- Awareness raising and training support
- Clear RI/RE expectations of host institutions
- Transparent internal RI/RE processes

Research integrity and ethics

- Policies on open access, data management, transparency
- FAIR, data curation training & support
- Policies on trial registration, publishing all results
- Own EDI practices
- EDI requirement in funding applications
- Policies on bullying/harassment

Openness and transparency

Equity, diversity and inclusion

Research

Assessment

- Assessment of individuals Assessment of projects
- Assessment of organisations

Incentives and rewards

- Collegiality and collaboration
- Effective management and leadership
- Better publication practices

Career sustainability and researcher wellbeing

- Funding support across career pathway
- Professional development support
- Visibility, engagement, networking
- Funding practices



Research Integrity and ethics

Irish Funder initiatives

- Changes to General T&C to mandate research integrity policies and processes in host institutions
- Mandatory training of PIs and their teams
- Participation in international policy groups (Science Europe, Global Research Council, ALLEA etc.)

National initiatives

- National RI Forum
- National RI Policy Statements
- Framework for Collaborative Research
- EPIGEUM Training

Research
Integrity at
the heart of
research
culture

International Funder initiatives

- EU: requirement for compliance with the European Code of Conduct
- UKRI: Good research resource hub
- Wellcome Trust: Reimagining Research Culture initiative
- Science Europe Working groups
- Global Research Council Statement

EU SwafS projects

- Field-specific codes of conduct
- RIPP Guidelines for RFOs and RPOs
- Ethical frameworks in emerging areas
- Platforms (Embassy of Good Science)
- Training at all levels
- Collaboration and Networks



Research assessment

Assessment criteria define the thing we value in the research system, so the criteria must support all the things that we would like the system to deliver.

Challenge

Different projects, different people, different outputs, and different contributions often need to be assessed in the same competition.

AGREEMENT ON REFORMING
RESEARCH ASSESSMENT

- Recognise the diversity of contributions to, and careers in, research appropriate to its nature
- Base assessment primarily on qualitative evaluation, supported by responsible use of quantitative indicators
- Abandon inappropriate uses of journal- and publication-based metrics, in particular Journal Impact Factor (JIF) and h-index
- Avoid the use of rankings of research organisations
- Review and develop new research assessment criteria, tools and processes for individual researchers, research projects, research teams, units and institutions

Examples of other initiatives happening or in gestation:

- Use of Narrative CVs to capture broader contributions (e.g. Science Europe, Royal Society, HRB)
- Innovative peer review and value-based assessment models (SCOPE Framework)
- Use quantitative indicators for quantitative things (Leiden Manifesto)
- Diversify indicators (e.g. Publons, ORCiD, open peer review, CRediT, EQUATOR Network, Altmetrics, pre-print servers etc.) (UKRI)



Incentives and rewards

How can we incentivise positive behaviours and reward 'evidenced' good practice?



The San Francisco Declaration (DORA) advocates for evaluation questions that aim to increase the value of the research and reduce waste (EViR)



- Focus on relevance in the application process
- HRB Impact Award to recognise overall contributions
- Build collegiality and team science into many schemes
- Support leadership training for Emerging Investigators
- Promoting better publication practices



SE WG on Recognition Systems of Research to improve the framework conditions for performing and funding research in Europe.



- Assess responsible research practices
- Value complete reporting
- Reward the practice of open science
- Acknowledge a broad range of research activities
- Recognise other essential tasks like peer review and mentoring.



Career sustainability and wellbeing



- Funding across the career pathway from PhD to Leaders
- Support for mobility (Dorothy Post-docs, part of funding)
- Seek to assess applicants using broad criteria
- Provide flexibility and financial support for career breaks (maternity leave, carer leave etc.)
- Promote visibility of early career researchers (HRB Ones to Watch)



Changes to funding practices

 Anonymous grant submissions, minimum-duration contracts, specific funding to underrepresented groups, greater availability of smaller funding awards

More support for early-career researchers

- Specific ECR funding (including training and mentoring)
- Rewards for those who don't publish

Rethinking funding criteria and incentives

- Reward good research practices and rigorous ethics
- Look more broadly at the culture of host institutions

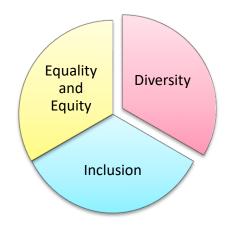


Equality, equity, diversity and inclusion

I believe in a research culture that recognises a diversity of contributions to science and society; that celebrates high quality and impactful research; and that values sharing, collaboration, integrity and engagement with society, transmitting knowledge from generation to generation.

Mariya Gabriel, European Commissioner for Innovation, Research,
 Culture, Education and Youth

- EDI requirements in funding applications
- International push to recognise contributions (CRediT)
- Including equity considerations in partner choice and roles



- HRB Monitor the gender mix and disciplinarity of review panels
- All else being equal HRB will award equally ranked projects to the lessrepresented gender
- Unconscious bias training for review panels
- Athena Swann accreditation required



Diversity and inclusion: helping more ideas thrive

- Wellcome Trust: Research Enrichment Funding and change to design of new funding schemes
- EDIS Collaboration to advance equality diversity and inclusion



Openness and transparency

Open access to publications

- Open Research Platforms such as HRB Open Research, Open Research Europe
- Mandatory OA policy (HRB, SFI, IRC)
- cOAlition S and Plan S (SFI a member and HRB to join)
- National Open Research Forum (many funders and Government departments are members)

Open access to data

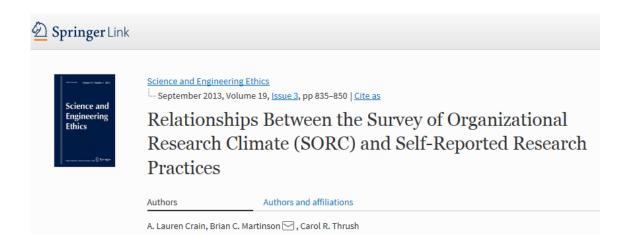
- Requirement for DMPs in applications
- FAIR Data Training (EU and HRB)
- HRB Training of Data Stewarts
- HRB engagement in FAIRsFAIR EU policy programme
- HRB collaboration with CSO for data linkage and sharing
- OECD, EU and SE Working Groups on data sharing and supporting infrastructures

Open access to research processes

- Observers on assessment panels
- Public reviewers
- PPI Ignite and PPI in awards
- Funder engagement with the public to prioritize investment (James Lind Alliance and SFI National Survey
- Transparency about assessment processes (e.g. HRB website)
- Transparency about research design and conduct (trial registration, protocol publications etc.



Is it really possible to change the culture?



- The more positive the organisational research climate, the higher the likelihood of good research practices and the lower the likelihood of unacceptable research practices
- The findings are clear that misconduct is not about dealing with a few "bad apples" but about changing organisational and structural research climate issues and that will require strong policy implementation



Final thoughts

Funding agencies, research institutions and researchers have different perspectives

- Funding agencies think about their actions in the context of their strategic mission and the policy and evidence needs of their paymasters
- Will often approach their activities from the perspective of their responsibilities to protect **public investment** in research and derive **value for money** from that investment.
- Research institutions may be thinking about resources and reputation (e.g. world ranking),
- Researchers may be thinking about knowledge production and career progression.

But ultimately we all want the same thing – high-quality, relevant research conducted in an environment that values the individual, the power of collaboration and multi-disciplinarity, and the ultimate benefits that the research outputs can have for society at large.





Thank-you for listening!

Wednesday March 03, 1993







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